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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,416	01/06/2005	Serge Creutz	SN131 PCT 1	8963
137 DOW CORNIT	7590 02/28/200 NG CORPORATION O	EXAMINER		
2200 W. SALZ	BURG ROAD	BOYER, CHARLES I		
P.O. BOX 994 MIDLAND, MI 48686-0994			ART UNIT	PAPER NUMBER
			1751	
			·	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE	
3 MC	NTHS	02/28/2007	FLECTRONIC	

### Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/28/2007.

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patents.admin@dowcorning.com

Office Action Summary		Application No.	Applicant(s)				
		10/521,416	CREUTZ ET AL.				
		Examiner	Art Unit				
		Charles I. Boyer	1751				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of the may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. It is specified above, the maximum statutory period of the reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ARANDONE.	N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133)				
Status							
1)[	Responsive to communication(s) filed on <u>07 December 2006</u> .						
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	i)⊠ Claim(s) <u>1-20</u> is/are rejected.						
	Claim(s) is/are objected to.	·					
8)[	8) Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers						
9)[	The specification is objected to by the Examine	r.					
	The drawing(s) filed on is/are: a) ☐ acce		Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
occurred detailed Office action for a list of the certified copies not received.							
Attachment	t(s)						
1) Notic	e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2)   Notic	2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application						
Pape	Paper No(s)/Mail Date 6) Other:						

#### **DETAILED ACTION**

This action is responsive to applicants' amendment and response received November 13, 2006. Claims 1-20 are currently pending.

# Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 2, and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 appears to be broader than claim 1 from which it depends. Claim 1 requires the number of carbon atoms in the R group of the siloxane to be at least 1.3, however claim 2 allows for the siloxane to be solely a polydimethylsiloxane. Claim 5 appears to be broader than claim 1 from which it depends. The "substantially fully esterified" limitation is broader than the degree of esterification set forth in claim 1.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 1, 5-7, 11, and 18 under 35 U.S.C. 102(b) as being anticipated by Cella et al, US 4,272,544 is withdrawn in view of applicants' amendment and response.

- 4. The rejection of claims 1-3, 5, 7, 11, 13, and 17-20 under 35 U.S.C. 102(b) as being anticipated by Yamada et al, US 4,719,034 is withdrawn in view of applicants' amendment and response.
- 5. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Laughlin et al, US 4,868,169.

O'Laughlin et al teach a skin cream comprising up to 2% polydimethylsiloxane or polyphenylmethylsiloxane, up to 13% glyceryl monostearate, up to 7% polysorbate 60, which is an ethoxylated alcohol, micronized powder, cetyl alcohol, and a wax thickener (col. 4, lines 35-53). Note that paraffin wax is a suitable thickener of the invention (col. 3, lines 15-23). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

Applicants have traversed this rejection with respect to claim 1, but not with respect to claim 13. Accordingly, the rejection is maintained.

6. Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmid et al, US 6,610,752.

Schmid et al teach defoamer granules comprising polydimethylsiloxane,

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microfine silanized silica, paraffin, and bis-stearyl ethylenediamide (col. 28, example 6). As this reference meets all material limitations of the claims at hand, the reference is anticipatory. The examiner notes that the silicone fluid of claim 13 is satisfied by polydimethylsiloxane, an extremely common defoamer in the art.

Applicants have traversed this rejection with respect to claim 1, but not with respect to claim 13. Accordingly, the rejection is maintained.

7. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Minami et al, WO 01/39733 (US 6,890,543 for English translation).

Minami et al teach a lipstick comprising 10% polyethylene wax, 4% microcrystalline wax, 7% glyceryl diisostearate, 30% silicone resin, 3% silica, 4.5% titanium dioxide pigment, and 5% dimethylpolysiloxane (col. 9, example 19). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

Applicants have traversed this rejection with respect to claim 1, but not with respect to claim 13. Upon further consideration, the reference remains anticipatory with respect to claim 13.

# Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-8, 11, 13, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al, US 4,719,034.

Yamada et al teach a solid silicone defoaming agent comprising 30% of a silicone composition consisting of finely divided silica and a dimethylsiloxane-methyltetradecylsiloxane-methyl(2-phenylethyl)siloxane copolymer, 30% glyceryl monostearate, and 20% propylene glycol monostearate (col. 6, example 3). Note that suitable glycerol esters of the invention include glycerol triesters and suitable propylene glycol esters of the invention include propylene glycol diesters (col. 2, lines 52-63). Accordingly, it would have been obvious to one of ordinary skill in the art to substitute either a propylene glycol diester or glycerol triester for one of the monoesters in example 3 and so render obvious the claims at hand, as diester and trimester are taught as suitable in these compositions.

Applicants have traversed this rejection on the grounds that the degree of esterification claimed is not taught by the reference. The examiner disagrees and maintains that either a glycerol triester or a propylene glycol diester will satisfy this claim limitation.

10. Claims 1, 2, 4-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid et al, US 6,610,752.

Schmid et al are relied upon as set forth above. Suitable organopolysioxanes of the invention may have as their substituents, methyl, ethyl, propyl, butyl, and phenyl

(col. 2, lines 34-43). Besides silicones, other defoamers for use in the invention include the mono, di, or triesters of glycerol (col. 4, lines 64-67). Note that these granules are added to detergents which may contain well known nonionic surfactants such as ethoxylated alcohols and ethoxylated alkyl phenols (col. 9, lines 40-67). Schmid et al do not specifically teach a combination of silicone defoamers and mixtures of glycerol esters, however, as these esters are specifically taught as well known defoamers, it would have been obvious to one of ordinary skill in the art to formulate a defoaming granule incorporating these esters with a reasonable expectation of enhancing its defoaming efficacy.

Applicants have traversed this rejection on the grounds that Schmid et al fail to disclose the foam control composition as recited in claim 1. Nowhere in Schmid et al is a foam control composition comprising a polydiorganosiloxane fluid, a hydrophobic filler dispersed in the polydiorganosiloxane fluid, and the additive composition of claim 1 and claims depending therefrom disclosed or suggested.

The examiner disagrees and maintains organopolysioxanes having as their substituents ethyl, propyl, butyl, and phenyl will satisfy the siloxane fluid claimed, the silanized silica satisfies the filler claimed, a glycerol trimester, taught by the reference, will satisfy component A, and the bis-stearyl ethylenediamide serves as component B. Accordingly, the rejection is maintained.

11. Claims 1, 2, 5-7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koczo et al, US 5,846,454.

Koczo et al teach an antifoam concentrate comprising a polydiorganosiloxane, fine solid particles, and a nonionic emulsifier (see abstract). Suitable organic groups of the organosiloxane include ethyl, propyl, butyl, or phenyl (col. 2, lines 55-57), and the emulsifier component may contain two emulsifiers, one with a low HLB (sorbitan tristearate) and a high HLB (glyceryl monolaurate and ethoxylated alcohols) (col. 4, lines 28-35). It would have been obvious to one of ordinary skill in the art to prepare a composition comprising an organosiloxane including an ethyl, propyl, butyl, or phenyl group, fine solid particles, and two emulsifiers including sorbitan tristearate and glyceryl monolaurate, and so render obvious the claims at hand.

12. Claims 1-11, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson, GB 1,523,957 in view of Schmid et al, US 6,610,752.

Dickinson teaches a foam control granule comprising a stearyl alcohol ethoxylate, silica, and a polydiorganosiloxane with mixed organic groups, wherein the organic groups are methyl, ethyl, and phenyl propyl, and the foam control substance is adhered to granular sodium tripolyphosphate (page 3, example 1). Suitable organic groups of the invention include octyl, tetradecyl, and phenyl (page 1, lines 41-44) and suitable additives of the invention include silicone resin copolymers, microcrystalline wax, and the esters of fatty acids with polyhydric alcohols, such as glycerol monostearate (page 2, lines 15-26). Dickinson does not specifically teach a combination of the polydiorganosiloxane fluid and polyol esterified carboxylate presently claimed.

Recall that Schmid et al teach defoamers in their invention including the mono, di, or triesters of glycerol (col. 4, lines 64-67). It appears then, that based on these references, glycerol esters are common additives for use in defoaming granules. Accordingly, it would have been obvious to one of ordinary skill in the art to incorporate a glycerol triester into the defoaming granules of Dickinson, as Dickinson teaches glycerol esters as suitable additives, and based on the teachings of Schmid et al, that glycerol triesters are suitable additives in defoaming granules.

13. Claims 1-11, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over L'Hostis et al, EP 1,075,863 in view of Schmid et al, US 6,610,752.

L'Hostis et al teach a silicone foam control granule comprising an organic fluid, a siloxane resin containing MQ groups, a silica filler having a particle size of from 0.5 to 30 microns, a particulate carrier, and a mixture of polydiorganosiloxanes, wherein at least one of the organic groups is a phenylpropyl group (page 10, claims 1-4, 10, 15, and 24). Suitable nonionic surfactants of the invention include ethoxylated alcohols and esters of glycerol (page 6, lines 30-35). L'Hostis et al do not specifically teach a combination of the polydiorganosiloxane fluid and polyol esterified carboxylate presently claimed.

Recall that Schmid et al teach defoamers in their invention including the mono, di, or triesters of glycerol (col. 4, lines 64-67). It appears then, that based on these references, glycerol esters are common additives for use in defoaming granules.

Accordingly, it would have been obvious to one of ordinary skill in the art to incorporate

a glycerol triester into the defoaming granules of L'Hostis et al, as the reference teaches glycerol esters as suitable additives, and based on the teachings of Schmid et al, that glycerol triesters are suitable additives in defoaming granules.

### Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles I. Boyer whose telephone number is 571 272 1311. The examiner can normally be reached on M-Th 9:30 to 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571 272 1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles I Boyer Primary Examiner Art Unit 1751